

18. (New) The server in Claim 17 wherein the means for retrieving said only one copy of said multimedia data from said data repository further comprises:

means for routing said requests from said multiple clients to a real-time scheduler;

*A<sup>2</sup>*  
means for analyzing said requests to determine a load on said network and said data repository;

means for determining when said requests can be granted based on said load; and

means for scheduling access to said multimedia data based on said step of determining.

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REMARKS

Applicants respectfully request consideration of the subject application as amended herein. This Amendment is submitted in response to an Office Action mailed on March 22, 1996. Applicants affirm the election (made with traverse) to continue prosecution of Claims 1, 2, and 4, as discussed with the Examiner during a telephone conversation on March 19, 1996. Claim 3 is drawn to a non-elected invention. Applicants therefore request that Claim 3 be cancelled without prejudice to the filing of continuations or divisionals. Claims 1, 2, and 4 were rejected, and in this Amendment, Applicants have

cancelled Claims 1, 2, and 4 and added new Claims 5 - 18. The new claims add no new matter and are fully supported by the original specification.

The Examiner objected to the title of the invention as not being descriptive. Applicants have replaced the title with a new title and respectfully request the Examiner to withdrawal his objections to the title. The Examiner also objected to the disclosure because on Page 1 of the application, co-pending applications were not identified properly. Applicants respectfully submit that the appropriate corrections have been made and request the Examiner to withdrawal his objection to the disclosure.

Claims 1, 2, and 4 were rejected under 35 U.S.C. §103 as being unpatentable over Mizuhara et al. (U.S. Patent No. 4,985,887). The Examiner contends that Mizuhara shows all elements of Claims 1, 2, and 4, with the exception of the client server environment. The Examiner submits, however, that "the client server media is very well known and commonly practiced by one skilled artisan at the time of the invention." Applicants respectfully submit that new Claims 5 - 18 are patentable over Mizuhara.

Mizuhara describes a system for selecting a transmissions control procedure or protocol suitable for communication of data via an integrated services digital network (ISDN), between a computer and a plurality of terminals (Mizuhara Col. 1, lines 8 - 12). The ISDN lines in Mizuhara include a plurality of B-channels of a 64 KB/s rate, and a D-channel of 16 or 64 KB/s (Mizuhara col. 2, lines 7 - 10). The B-channel is a data channel to transmit communication data from a terminal, while the D-channel is a control channel to transmit a signal for transmission control.

Mizuhara does not, however teach or suggest allocating an appropriate downstream physical address and downstream logical address to the client corresponding to the upstream physical address of the client, issuing a service request message from the client to the server via the upstream manager where the service request message includes the client downstream logical address and a service destination logical address, or generating a response message from the server to the client where the response message includes the client logical address. The use of logical addresses is significant because it allows for flexible routing of data without the need to keep track of the many different types of addresses in use for each type of data link.

Mizuhara also does not teach or suggest a server including an upstream manager, a downstream manager, and a connection service. There is no teaching or suggestion in Mizuhara for maintaining a connection service including information to connect a client, an upstream manager, a downstream manager, and appropriate services on a server. Neither is there any teaching in Mizuhara to use an upstream manager and a downstream manager in the manner claimed, wherein the upstream manager receives messages from the client and routes the messages to appropriate services on a server, while the downstream manager sends a stream of multimedia data from the service on the server to the client. This type of "partitioned" architecture, especially conducive to asymmetrical networks, is not disclosed by Mizuhara and Mizuhara thus does not teach or suggest the elements claimed in new Claims 5 - 18.

Finally, Applicants respectfully submit that new Claims 5 - 18 are patentable over Mizuhara because Mizuhara does not teach or suggest storing only one copy of multimedia data in a data repository, as claimed. This single

copy of the data is used to service requests from multiple clients. Additional client requests can be added without affecting the availability of the data to existing clients, and without requiring the data be replicated to handle the additional client requests. The claimed invention thus provides scalability without storing multiple copies of data, as do other systems that attempt to provide similar scalability. Applicants therefore respectfully submit that the claimed invention is patentable over Mizuhara.

In conclusion, it is respectfully submitted that in view of the amendments and remarks set forth herein, that all objections and rejections have been overcome. All claims are now in condition for allowance and such action is earnestly solicited.

Pursuant to Rule 1.136(a), Applicants hereby petition for an extension of time to respond to the outstanding Office Action. The extension fee of \$900 for a response filed within the third month is submitted concurrently herewith.

In the event that the Examiner finds any remaining impediment to the prompt allowance of these claims that could be clarified with a telephone conference, the Examiner is invited to contact James H. Salter at (408) 720-8598. Please charge any shortages and credit any overcharges to our Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN

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